



## flat floater (heelsplitter)

*Anodonta suborbiculata*

Kingdom: Animalia  
Division/Phylum: Mollusca  
Class: Bivalvia

### Features

The shell of a flat floater or heelsplitter mussel is large, thin, nearly circular, and compressed to slightly "inflated." The anterior and ventral edges are broadly rounded. The posterior end is bluntly pointed. The dorsal (hinge) side is nearly straight. The outside of the shell is smooth, shiny, and yellow or yellowish green to dark green with faint green rays in some shells. The inside of the shell is white or pinkish white and iridescent. Flat floaters may grow to seven inches long.

### Natural History

The flat floater is found in ponds, lakes, or sluggish mud-bottomed pools of creeks and rivers. It may be expanding its range in the Mississippi River. Freshwater mussel distribution in Iowa is not well documented. They have an elaborate reproductive system. During spawning, males release sperm into the water. The sperm are drawn inside the female's shell, where they fertilize eggs in her body. The fertilized eggs develop into larvae (glochidia) and are stored for a time in the female's gills. When the glochidia mature, the female generally expels them

into the water where they must attach as parasites to the gills or fins of fish. Larvae remain on the host fish for a period of weeks or months. Young mussels then detach from their host and drop to the bottom of the body of water. Host fish for this mussel are not known. Mussels are filter-feeders, bringing in water and the organic matter it contains through the incurrent siphon, filtering the particles out, then sending the rest of the water away from the body through the excurrent siphon. Particles filtered include plankton and detritus. Mature mussels spend most of their lives, which range from 10 to 100 years, partially or wholly buried in the bottom substrate.

### Habitats

Mississippi River; Missouri River

### Iowa Status

uncommon; native

### Iowa Range

Mississippi River; Missouri River

### Bibliography

Iowa Department of Natural Resources. 2001.  
*Biodiversity of Iowa: Aquatic Habitats* CD-ROM.